IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	Atty. Docket: NL 020638
GIJSBRECHT C. WIRTZ ET AL.	Group Art Unit: 2627
Serial No.: 10/521,134	Examiner: LINH THI NGUYEN
Filed: January 12, 2005	CONF. NO.: 6808

TITLE: COPY CONTROL USING DIGITAL SPEED BUMPS

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

Appellants herewith respectfully present their Brief on Appeal as follows:

REAL PARTY IN INTEREST

The real party in interest is Koninklijke Philips Electronics N.V., a corporation of The Netherlands having an office and a place of business at Groenewoudseweg 1, Eindhoven, Netherlands 5621 BA.

RELATED APPEALS AND INTERFERENCES

To the best of Appellants' knowledge and belief, there are no related appeals or interferences.

STATUS OF CLAIMS

Claims 1-16 are pending in this application. Claims 1-16 are rejected in the Final Office Action that issued September 6, 2006. This rejection was upheld, in an Advisory Action that issued November 8, 2006. Claims 1-16 are the subject of this appeal.

STATUS OF AMENDMENTS

An Amendment After Final Action was filed October 16, 2006 in response to a Final Office Action that issued September 6, 2006. The Advisory Action of November 8, 2006 upheld the rejection in response to that Amendment. This Appeal Brief is in response to the Final Office Action of September 6, 2006 that rejected Claims 1-16 and the Advisory Action that upheld that rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

The present system, for example, as claimed in Claim 1, relates to a method of controlling a digital media recorder (for example, recorder 105/205, FIGs. 1, 2) capable of recording digital media sequences (for example, an audio or a video sequence, page 2, line 22) on a digital media carrier (for example, recording media 108/208, FIG. 1, FIG. 2 and "a CD-R", page 5, line 11), comprising the steps of extracting, from an input media sequence (for example, an audio or a video sequence, page 2, line 22), a media sub-sequence (for example, sub-sequences of tracks or albums, page 5, line 20), calculating a sub-sequence digital fingerprint (for example, extracted fingerprints, page 6, line 4) from the media sub-sequence (for example, sub-sequences of tracks or albums, page 5, line 20), comparing the sub-sequence fingerprint (for example, extracted fingerprints, page 6, line 4) with at least one first reference fingerprint (for example, "fingerprints of recordings made on discs prior to the current one", page 2, lines 22-23), said first reference fingerprint being fetched from a primary database of fingerprints (for example, "a primary database that contains fingerprints of recordings made on discs prior to the current one", page 5, lines 22-23) yielding a first comparison value ("[e]ach of the extracted fingerprints is compared to a primary database for a match in a matching step 302", page 6, lines 4-5), depending on the first comparison value, allowing (for example, "[e]ach of the

extracted fingerprints is compared to a primary database for a match in a matching step 302. If no match is found, implying that a recording of the sequence is authorized, the method continues in a storage determination step 305. During the storage determination step 305 it is decided whether or not the fingerprint is to be stored in the secondary database...", page 6, lines 4-8) or obstructing (for example, if a match is found, then it is determined whether the copy limit is reached in step 303. If copy limit is reached, then the appropriate action is taken in step 304. "The action taken in step 304...includes such actions as aborting the recording process, continuing the recording process at a reduced quality as well as notifying a user of the action taken.", page 6, lines 12-18, FIG. 3) recording of the input media sequence on the media carrier, comparing the sub-sequence fingerprint with at least one second reference fingerprint (for example, "the fingerprint is already present in the secondary database", page 6, lines 21-22), said second reference fingerprint being fetched from a secondary database of fingerprints (for example, "a secondary database that contains those [fingerprints] of the current disc", page 5, line 23) yielding a second comparison value, depending on the second comparison value, storing the fingerprint in the secondary database (for example, if the matching entry has not yet reached the copy limit, as is checked in a copy limit checking step 303, the fingerprint is stored in the secondary database, as indicated in a storage step 307, page 6, line 19-21, FIG. 3), depending on at least

the first comparison value, updating the primary database with information from the secondary database that the digital media sequence has been recorded on the media carrier (for example, moving the remaining fingerprints from the secondary to the primary database using a first-in first-out strategy, page 6, lines 31-32, steps 311-312, FIG. 3).

The present system, for example, as claimed in claim 7, relates to a digital media recorder (for example, recorder 105/205, FIG. 1, FIG. 2), capable of recording digital media sequences (for example, an audio or a video sequence, page 2, line 22) on a digital media carrier comprising: means (for example of means, software stored in the memory 103,203 of the recorder 100,200, page 5, lines 28-29) for comparing the sub-sequence fingerprint (for example, extracted fingerprints, page 6, line 4) with at least one second reference fingerprint (for example, "the fingerprint is already present in the secondary database", page 6, lines 21-22), said second reference fingerprint being fetched from a secondary database of fingerprints (for example, "a secondary database that contains those [fingerprints] of the current disc", page 5, line 23), yielding a second comparison value, means for storing the fingerprint in the secondary database (for example, "a secondary database that contains those [fingerprints] of the current disc", page 5, line 23), means for extracting, from an input media sequence (for example, an audio or a video sequence, page 2, line 22), a media sub-sequence (for example, sub-sequences of tracks or albums,

page 5, line 20), means for calculating a sub-sequence digital fingerprint (for example, extracted fingerprints, page 6, line 4) from the media sub-sequence (for example, sub-sequences of tracks or albums, page 5, line 20), means for comparing the sub-sequence fingerprint (for example, extracted fingerprints, page 6, line 4) with at least one first reference fingerprint (for example, "fingerprints of recordings made on discs prior to the current one", page 5, lines 22-23), said first reference fingerprint being fetched from a primary database of fingerprints (for example, "a primary database that contains fingerprints of recordings made on discs prior to the current one", page 5, lines 22-23), yielding a first comparison value, means for analyzing the first comparison value, means for recording the input media sequence (for example, an audio or a video sequence, page 2, line 22) on the media carrier (for example, recording media 108/208, FIG. 1, FIG. 2 and "a CD-R", page 5, line 11), means for obstructing recording of the input media sequence on the media carrier depending on the first comparison value (for example, if a match is found, then it is determined whether the copy limit is reached in step 303. If copy limit is reached, then the appropriate action is taken in step 304. "The action taken in step 304...includes such actions as aborting the recording process" page 6, lines 15-18), means for updating the primary database with information from the secondary database that the digital media sequence has been recorded on the media carrier (for example, updating step 312 involves incrementing the copy

counters of the fingerprints that occur in both databases, and moving the remaining fingerprints from the secondary to the primary database using a first-in first-out strategy, page 6, lines 29-32, steps 311-312, FIG. 3).

It should be explicitly noted that it is not the Applicants' intention that the currently claimed method and apparatus be limited to operation within this illustrative system beyond what is required by the claim language. Further description of the illustrative system is provided indicating portions of the claims which cover the illustrative system merely for compliance with requirements of this appeal without intending any further interpreted limitations be read into the claims as presented.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether Claims 1-13 of U.S. Patent Application Serial No. 10/521,134 are anticipated under 35 U.S.C. §102(b) over U.S. Application Publication No. 2002/00221635 to Park et al ("Park") and whether Claims 14-16 are unpatentable over Park in view of U.S. Patent No. 5,610,893 to Soga et al ("Soga"). The Appellants respectfully wish the Board to address the patentability of independent Claims 1 and 7, and further Claims 2-6 and 8-16, as depending on Claims 1 and 7, based on the requirements of Claims 1 and 7. This position is provided for the specific and stated purpose of simplifying the current issues on appeal. However, the Appellants herein specifically wish to reserve the right to argue and address the patentability of each of the further claims at a later date should the separately patentable subject matter of those claims later become an issue. Accordingly, this limitation of the subject matter presented for appeal herein, specifically limited to discussions of the patentability of Claims 1 and 7, is not intended as a waiver of Appellants' right to argue the patentability of the further claims and claim elements at that later time.

ARGUMENT

Claims 1-13 are said to be anticipated by Park and 14-16 are said to be unpatentable over Park in view of Soga.

The Park Patent

Park is directed to a recording and reproducing apparatus which includes a reproducing drive 101, main controller 111 and copy-protection disc table storage 114 as shown in FIG. 1 of Park. In Park, the copyright-protected disc table storage 114 is (emphasis added) "for storing list of the discs to be copyrighted" (see, paragraph [0032]). The main controller 111 looks up a copyright-protected disc table to "obtain track information and track addresses" of discs stored in the table (see, paragraph [0035]). Next the main controller 111 checks the disc identifier with the track information and addresses of each track retrieved from the look-up table (see, [0036]). If the disc identifier is not found in the look-up table, the main controller 111 writes the identifier of the disk to the look-up table (see, paragraph [0048]).

Park is cited for allegedly showing means for updating the primary database with information from the secondary database that the digital media sequence has been recorded on the media carrier. The Applicants respectfully disagree.

The Advisory Action states on page 2 that "Park does disclose 'the main controller 111, which looks up in the storage 114 for searching the identifiers of the disc,' if the identifier is not found in the lookup table then the lookup table is updated with the identifier" which alleges, for comparison purposes, the copy-protection disc table storage 114 is the primary database and the

main controller 111 is the second database. The Applicant respectfully disagrees. The main controller 111 is not a database. The main controller 111 merely looks up track and address information in the copy-protection disc table storage 114 and compares it to track and address information in the reproducing drive 101 (see, page 2, paragraph [0036]). Therefore, the main controller 111 does not serve as a database as described in the Advisory.

Even, arguendo, presuming that main controller 111 is the secondary database, there is still no disclosure or suggestion that Park compares the sub-sequence fingerprint with at least one second reference fingerprint, said second reference fingerprint being fetched from a secondary database of fingerprints, yielding a second comparison value as required by Claim 1, and substantively required by Claim 7, of the present system. Since the main controller 111/secondary database merely looks up and compares track and address information from the copy-protection disc table storage 114/primary database to information in the reproducing drive 101, the only information that could be fetched, arguendo, from the main controller 111/secondary database is the stored track and address information/first reference fingerprint from the copy-protection disc table storage 114/primary database. In other words, there are no second reference fingerprints in Park! Further, since there are no second reference fingerprints in Park, Park cannot disclose or suggest comparing a sub-sequence fingerprint with at least one

second reference fingerprint as recited in Claim 1, and substantively recited in Claim 7, of the present system.

The Advisory Action and the Final Office Action state that the above features, as recited in independent Claim 1, are shown in Park. Applicants respectfully disagree. The Applicants contend that it is not a sufficient showing that two databases are found in Park, an issue that in and of itself is contended by the Applicants, the databases must interact as outlined above. Further, Park does not disclose or suggest extracting from an input media sequence, a media subsequence as substantially recited in claims 1 and 7. Moreover, the MPEP section 2131 provides that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. The identical invention must be shown in as complete detail as contained in the claims.

Applicants respectfully submit that the Office Action and the Advisory Action fail to make a prima facie case of anticipation because Park does not satisfy MPEP section 2131 as an anticipatory reference. Accordingly, withdrawal of the 356 U.S.C. §102(b) rejection with regard to the claims is respectfully requested. These claims are therefore believed patentable over the art of record including Park for this reason alone.

Further, the Applicants respectfully submit that the claims are allowable for additional reasons. In the Advisory Action, page 2, lines 4-5 states, in reference to the Amendment After Final filed

October 16, 2006, that "Applicant's argue that Park does not disclose a sub-sequences fingerprint from the audio content". The Applicants respectfully refute this statement. On page 13 of the Amendment After Final filed October 16, 2006, "audio-minute" and "audio-sec fragments" are clearly explained as being **an example** of media subsequences being derived from the content directly as distinguished from the disk identifier information in Park which comprises track numbers and addresses of the entire disc. Therefore, it is respectfully submitted that the audio content mentioned in the Amendment After Final filed October 16, 2006, was merely provided in the Amendment as an example of media subsequences and the Applicants did not make nor suggest that the claims required these particular media subsequences as alleged by the Advisory Action.

In reference to the Advisory Action on page 2 stating, "sub-sequences fingerprint is merely anything, such as, channel bits, identifiers, ID information, and copy protection", the Applicants respectfully disagree with this statement. First, the sub-sequence fingerprints are clearly not 'merely anything'. Further, the specification of the present application clearly provides examples of what may constitute a sub-sequence fingerprint. As an example, "[f]or each audio-minute the fingerprint of a contiguous 3/8 audio-sec fragment is stored in the database..." (See, the present patent application, page 8, lines 13-14). Therefore, the sub-sequence fingerprint is not merely anything and is illustratively described

in the specification that provides an understanding of the terms as explained below in detail.

The MPEP in the §2106 entitled "Patentable Subject Matter – Computer-Related Inventions" in section II C. makes clear that (emphasis provided):

> Office personnel must rely on the applicant's disclosure to properly determine the meaning of ** the claims. Markman v. Westview Instruments, 52 F.3d 967, 980, 34 USPQ2d 1321, 1330 (Fed. Cir.) (en banc), aff 'd, U.S. , 116 S. Ct. 1384 (1996) ... ("In the absence of an express intent to impart a novel meaning to the claim terms, the words are presumed to take on the ordinary and customary meanings attributed to them by those of ordinary skill in the art.") However, an applicant is entitled to be his or her own lexicographer and may rebut the presumption that claim terms are to be given their ordinary and customary meaning by clearly setting forth a definition of the term that is different from its ordinary and customary meaning. See In re Paulsen, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994).< Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. Toro Co. v. White Consolidated Industries Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings.")... Any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention." Multiform Desiccants Inc. v. Medzam Ltd., 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). **>See also MPEP § 2111.01.<

The plain meaning doctrine is explained further in the MPEP 2111.01 entitled "Plain Meaning" wherein it is stated that (emphasis provided):

> I. <THE WORDS OF A CLAIM MUST BE GIVEN THEIR "PLAIN MEANING" UNLESS THEY ARE DEFINED IN THE SPECIFICATION
> While the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow. >In re American Academy of Science Tech Center, ___ F.3d ___, 2004 WL 1067528 (Fed. Cir. May 13, 2004)(The USPTO uses a different standard for construing claims than that used by district courts; during examination the USPTO must give claims their broadest reasonable interpretation.).< This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (discussed below)**>; Chef America, Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004)

This principle is further espoused in the MPEP 2173.01 entitled "Claim Terminology" wherein it is stated that (emphasis provided):

> A fundamental principle contained in 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as **>any special meaning assigned to a term is clearly set forth in the specification. See MPEP § 2111.01.< Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. As noted by the court in In re Swinehart, 439 F.2d 210, 160 USPQ 226 (CCPA 1971) ...

It is therefore respectfully submitted that the Examiner is not enabled to interpret a claim in a vacuum to be "merely anything" and attribute a different meaning to terms in claims that are particularly defined in the specification. However, this is just what is done in the Advisory Action wherein the term "subsequence

fingerprint" is interpreted in a vacuum as opposed to being properly construed in light of the specification. The Examiner's attention is respectfully called to the specification of the currently pending application wherein it is made clear that (emphasis provided):

> [f]or each audio-minute the fingerprint of a contiguous 3/8 audio-sec fragment is stored in the database..." (See, the present patent application, page 8, lines 13-14).

It is respectfully submitted that the specification makes clear that "calculating a sub-sequence digital fingerprint from the media sub-sequence" can not reasonably be construed to include "merely anything, such as, channel bits, identifiers, ID information, and copy protection" as alleged on page 2 of the Advisory Action. Further, it is respectfully submitted that a person skilled in the art would not interpret a media sub-sequence as track information and track addresses as described in Park.

The Soga Patent

Soga is cited for showing a method of ejecting the media carrier in response to the completion of data transfer to the media carrier (see, Final Office Action, page 5, lines 5-6). However, both Park and Soga fail to teach a secondary database updating the primary database in response to ejecting the media carrier as required by Claims 14-16 of the present invention.

It is respectfully submitted that claims 1-16 are allowable for the above reasons and an indication to that effect is respectfully requested.

CONCLUSION

Claims 1-16 are patentable over Park, Soga and any combination thereof.

Thus the Examiner's rejection of Claims 1-16 should be reversed.

Respectfully submitted,

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APPENDIX A

CLAIMS ON APPEAL

1. A method of controlling a digital media recorder capable of recording digital media sequences on a digital media carrier, comprising the steps of:

- extracting, from an input media sequence, a media sub-sequence,

- calculating a sub-sequence digital fingerprint from the media sub-sequence,

- comparing the sub-sequence fingerprint with at least one first reference fingerprint, said first reference fingerprint being fetched from a primary database of fingerprints, yielding a first comparison value,

- depending on the first comparison value, allowing or obstructing recording of the input media sequence on the media carrier,

- comparing the sub-sequence fingerprint with at least one second reference fingerprint, said second reference fingerprint being fetched from a secondary database of fingerprints, yielding a second comparison value,

- depending on the second comparison value, storing the fingerprint in the secondary database,

- depending on at least the first comparison value, updating the primary database with information from the secondary

database that the digital media sequence has been recorded on the media carrier.

2. A method according to claim 1, where the primary database of fingerprints includes a copy count number and a copy limit number associated with fingerprints in the list, where the step of comparing the sub-sequence fingerprint with the first reference fingerprint includes comparing the copy count number and the copy limit number and where the step of updating the primary database includes updating the copy count number associated with the fingerprint.

3. A method according to claim 1, further comprising the step of removing older entries from the primary database in favor of newer entries so as to limit the size of the primary database to a predetermined number.

4. A method according to claim 1, where the updating of the primary database is dependent on whether or not the recording of the at least one media sub-sequence is completed.

5. A method according to claim 1, where the obstruction of the recording includes at least one of the actions: aborting the recording, reducing the quality of the recording, notifying a user of the obstruction.

6. A method according to claim 1, where the extraction of the sub-sequence includes extraction during a predetermined time interval, said time interval having a length determined at least partly by the type of the media sequence.

7. A digital media recorder capable of recording digital media sequences on a digital media carrier, comprising:

- means for comparing the sub-sequence fingerprint with at least one second reference fingerprint, said second reference fingerprint being fetched from a secondary database of fingerprints, yielding a second comparison value,

- means for storing the fingerprint in the secondary database

- means for extracting, from an input media sequence, a media sub-sequence,

- means for calculating a sub-sequence digital fingerprint from the media sub-sequence,

- means for comparing the sub-sequence fingerprint with at least one first reference fingerprint, said first reference fingerprint being fetched from a primary database of fingerprints, yielding a first comparison value,

- means for analyzing the first comparison value,

- means for recording the input media sequence on the media carrier,

- means for obstructing recording of the input media sequence on the media carrier depending on the first comparison value,

- means for updating the primary database with information from the secondary database that the digital media sequence has been recorded on the media carrier.

8. A recorder according to claim 7, where the primary database of fingerprints includes a copy count number and a copy limit number associated with fingerprints in the list, where the means for comparing the sub-sequence fingerprint with the first reference fingerprint includes means for comparing the copy count number and the copy limit number and where the means for updating the primary database includes means for updating the copy count number associated with the fingerprint.

9. A recorder according to claim 7 being arranged to remove older entries from the primary database in favor of newer entries so as to limit the size of the primary database to a predetermined number.

10. A recorder according to claim 7, where the means for updating the primary database are arranged to operate in dependence on means capable of establishing whether or not the recording of the at least one media sub-sequence is completed.

11. A recorder according to claim 7, where the obstruction means includes obstructing means capable of at least one of the actions: aborting the recording, reducing the quality of the recording, notifying a user of the obstruction.

12. A recorder according to claim 7, where the means for extraction of the sub-sequence includes means for extraction during a predetermined time interval, said time interval having a length determined at least partly by the type of the media sequence.

13. A computer comprising a recorder according to claim 7 wherein the computer is configured to control the recorder.

14. A method as in claim 1 wherein the secondary database updates the primary database in response to ejecting the media carrier.

15. A recorder as in claim 7 wherein the secondary database updates the primary database in response to ejecting the media carrier.

16. A computer as in claim 13 wherein computer is configured to update the primary database with the secondary database in response to ejecting the media carrier.

APPENDIX B

Evidence on Appeal

None

APPENDIX C

Related Proceedings of Appeal

None